# NON COMMERCIAL TECHNOLOGY TRANSFER IN GOVERNMENT PROGRAM (OVERVIEW OF THE INTERNAL TO JAPAN PROGRAM)

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## **ABSTRACT**

The objective of this article is to identify and analyze non-commercial technology transfer in government programs, namely apprenticeship programs to Japan. Technology transfer made by Indonesia is an effort that is not easy to do. Constraints in technology transfer cannot be avoided. The main obstacle in technology transfer is the unbalanced position between technology providers and technology recipients. This can be seen in the technology transfer agreement. Technology transfer is actually in the interests of recipient countries and transfer states in turn. In addition, there are also national legal rules regarding technology transfer that are not yet ready in Indonesia. The method used in this research is normative juridical using secondary data. Technology transfer in Indonesia does not have its own legal provisions, but is attached to other laws, such as patent law, laws relating to investment, etc. The internship program to Japan is one of the government's efforts to improve technology transfer in Indonesia. The main objective is not only to improve technology mastery capabilities for the Indonesian people through an apprenticeship program to Japan but also to benefit from mastering the technology he learned while undergoing an internship program in Japan and so on will be developed in Indonesia so as to create business opportunities that are able to create a field work and be able to innovate from technological capabilities that have been obtained, such as patent law, laws relating to investment, etc. The internship program to Japan is one of the government's efforts to improve technology transfer in Indonesia. The main objective is not only to improve technology mastery capabilities for the Indonesian people through an apprenticeship program to Japan but also to benefit from mastering the technology he learned while undergoing an internship program in Japan and so on will be developed in Indonesia so as to create business opportunities that are able to create a field work and be able to innovate from technological capabilities that have been obtained, such as patent law, laws relating to investment, etc. The internship program to Japan is one of the government's efforts to improve technology transfer in Indonesia. The main objective is not only to improve the ability of technology mastery for the people of Indonesia through an internship program to Japan but also benefit by mastering the technology he learned while undergoing an internship program in Japan and so on will be developed in Indonesia so as to create business opportunities that are able to create a field work and be able to innovate from technological capabilities that have been obtained.

Keywords: Technology Transfer, Internship Program, Indonesia and Japan

### INTRODUCTION

Technology has caused changes in human life and in current industrial era 4.0, technology is a determinant of success of a country's economic growth. Aside from being a determinant of a country's economic success, the use of technology can also be a benchmark for the development of a country so that it cannot be denied that technology has an important role for a country. One important ability that must be possessed by a country is the ability in mastering technology. The state must implement, develop and master good technology in order to align itself with other countries, especially developed countries.

The dependence of developing countries on technology from developed countries is a fact that cannot be denied. Developing countries really need the help of developed countries to make technology transfer that cannot be done by developing countries. The ability of a country to develop technological capability is largely determined by technological efforts. One of the efforts made by the Indonesian government is to transfer technology from developed countries to Indonesia. This strategic effort was made to encourage the utilization and development of technology in Indonesia. In principle, the application, development, and mastery of technology always begins and is accompanied by efforts to transfer technology.

Technology transfer by developing countries (such as Indonesia) is an effort that is not easy to do. Constraints in technology transfer cannot be avoided. The main obstacle in technology transfer is the unbalanced position between technology providers and technology recipients. This can be seen in the technology transfer agreement. Technology transfer is actually in the interests of recipient countries and transfer states in turn. In addition, there are also national legal rules regarding technology transfer that are not yet ready in Indonesia. Technology transfer does not have its own legal rules, but is attached to other laws, such as patent law, laws relating to investment, etc.

The transfer of technology from developed countries to developing countries takes place through a series of processes and does not happen automatically. One way to transfer the technology is by means of a written agreement as stipulated in Law No. 13 of 2016 concerning Patents. Although Indonesia has regulated juridically about the mechanism of technology transfer which is spread in various laws and regulations, in practice the implementation still faces various problems (Zulaekhah, 2008: 72-73). Developed countries continue to find new processes and machines that are more complicated and economical.

Identification of obstacles in technology transfer to developing countries and facilities that can be provided by developed countries that possess technology, in terms of determining fair and rational requirements both in the technical material and in the

process of transitioning to developing countries, so that it can help the country in achieve sustainable development (sustainable development) and in the development of technology that is tailored to the production structure of the country concerned (Sumatoro, 1993: 26).

The internship program to Japan is one of the government's efforts to improve technology transfer in Indonesia. The main objective is not only to improve technology mastery capabilities for the Indonesian people through an apprenticeship program to Japan but also to benefit from mastering the technology he learned while undergoing an internship program in Japan and so on will be developed in Indonesia so as to create business opportunities that are able to create a field work and be able to innovate from technological capabilities that have been obtained.

Technology transfer is an effective way used by Indonesia to increase economic growth and industrialization, because it takes a long time if Indonesia must follow the pattern of technological mastery efforts that have been carried out by Japan in the past few centuries, while at the same time economic development is needed (Prasada, 2016: 161).

Based on the explanation that has been stated above, it is very urgent to be researched about: (1) How is the transfer of non-commercial technology carried out by the government on an apprenticeship program to Japan? (2) What is the impact of the internship program in Japan especially related to technology transfer?

#### RESEARCH METHODS

This research is a legal research in normative / doctrinal studies. Several approaches will be used in this research that are useful for getting information from various aspects of the problem being tried to find the answer. In connection with the type of research used is normative juridical, the approach taken is the statutory approach (statue approach) and the conceptual approach (conceptual approach). This research was conducted to examine the rules relating to technology transfer internship program to Japan. The concept approach is used to understand technology transfer in an internship program to Japan.

#### RESULT AND DISCUSSION

The availability of employment that is not yet balanced with job seekers in Indonesia, is one of the factors causing the high interest of Indonesians to work abroad, especially in Japan. Japan is one of the destination countries that attract workers to get work experience abroad with decent income (Wahyuningsih, 2017: 82). An apprenticeship program to Japan as an alternative to reduce unemployment and a means of building a productive workforce.

Japanese apprenticeship is a form of cooperation between the Republic of Indonesia Ministry of Manpower and IM Japan in order to improve the human resources of the Indonesian people, especially the younger generation in the context of welcoming the globalization era. This apprenticeship program really requires the ability of participants in Japanese, not everyday Japanese but also Japanese which is used for work reports and others (Suyono, 2017: 76). Internship to Japan itself is a program of learning while practicing work carried out for high school graduates equivalent to Japan. This program is carried out by a partnership between the government of the Republic of Indonesia and the government of Japan (government to government) called the IM Japan program organized by the Provincial Office of Manpower and Transmigration throughout Indonesia.

The basis of the implementation of the apprenticeship program to Japan is a memorandum of understanding (MOU) between the director general of training and productivity of the Republic of Indonesia's Ministry of Manpower and International Menpower Development Japan (IM) on September 16, 1994, updated with amendments on September 6, 2008. Type of apprenticeship program work Japan has a variety of things, such as construction, engineering, food, energy and natural resources, and electronics. So it can be concluded apprenticeship is an activity of the job training system which is held in an integrated manner between training in the training institution and working directly under the guidance and supervision of the instructor.

With the apprenticeship program to Japan, apprentice program participants can work while studying. In addition to getting their salary / wages from their work, they also get lessons and experience from their work because they work under the supervision and guidance of instructors or more experienced workers (Solechan, 2018: 336).

The apprenticeship program to Japan is a program between the Indonesian government and the Japanese government, apprentices are indeed employed in their respective companies according to their respective competencies. Regulation of the Minister of Manpower and Transmigration of the Republic of Indonesia Number Per. 08 / Men / V / 2008 Regarding Procedures for Licensing and Apprenticeship Overseas Apprenticeship has governed how to carry out internships abroad starting from the implementation basis, rules regarding participant requirements, licensing, registration, to rights and obligations for government agencies and program participants an internship to Japan. The apprenticeship program can be carried out starting from registration, preparing the files, following all stages of the test and selection. The things to do are as follows:

- 1. Administration selection, which is checked when participants register, labor officers and transmigration officers in Central Java Province.
- 2. Body safety test, which is by the team (central, IM japan, and region). The requirements are: (1) Minimum height of 160 cm; (2); body weight of at least 50 kg; (3) No bodily defects, bodily organs, tattoos, and piercing
- 3. Basic mathematics test, conducted by the central team and im Japan, 20 pieces of basic mathematics questions took 5 minutes, a minimum score of 8.

- 4. Physical endurance tests, conducted by the central team, the Japan team, and the regions. With the program: (1) Running 3000 meters, 15 minutes; (2) Push up 35 times; (3) Sit-ups 25 times.
- 5. Interview test, conducted by: (1) Performance; (2) Insights, general knowledge; (3) Verbal abilities; (4) Definition of the program; (5) Checking the original file.
- 6. Stage 1 medical check-ups are carried out by hospitals / clinics / laboratories which are approved by the Indonesian Ministry of Manpower and IM Japan including: (1) Blood examination; (2) Urine; (3) Eyes, feces; (4) Lungs; (5) Narcotics; (6) HIV / AIDS
- 7. Debriefing of Japanese language and culture is carried out in their respective regions.
- 8. Japanese language test (3 times remedial)
- 9. Pre-departure training phase 1: (1) Held in provincial offices; (2) The duration of training is 2 months 10 days; (3) Study rooms and instructors are covered by the provincial employment agency; (4) Evaluation of participants using the knockout system; (5) Accommodation and consumption are borne by the participant
- 10. Medical check-up stage 2 for those who passed stage 1
- 11. Pre-departure training phase 2, namely: (1) Held in b2ppkln; (2) The duration of training is 2 months; (3) All costs are disrupted by the Indonesian Ministry of Manpower; (4) Participants bring administrative documents
- 12. Arranging passports and visas, is done after the prospective apprentices are declared to have passed a medical check-up with the provisions of a 48-page passport and a validity period of 5 years. Requirements for prospective participants, minimum technical requirements for high school graduation or equivalent: Male, Minimum age 20 years, maximum 26 years old, Vocational Pathway at least 18 years old, Passed the test / selection (body safety, mathematics, physical endurance (running, puch-up), and sit-ups) interviews, and medical check-ups), especially high school / diploma graduates must be certified in the technical field of 220 hours of practice.

The rules regarding apprenticeship are also contained in several statutory regulations, namely the Labor Law Chapter V Article 9 "Job training is held and directed to equip, improve the ability of productivity and welfare". Regulation of the Minister of Manpower and Transmigration of the Republic of Indonesia Number Per. 08 / Men / V / 2008 Regarding Procedures for Licensing and Apprenticeship Overseas Apprenticeship Article 1 "Apprenticeship abroad is part of a work training system that is carried out intact and integrated in Indonesia and abroad by job training institutions or companies or government agencies or educational institutions under the guidance and supervision of instructors or workers who are more experienced, in the process of producing goods or services in order to master certain skills or expertise.

Training is an effort to improve the quality of human resources. The training is basically carried out in order to meet the learning needs of the community. In Indonesia there have been many training courses, of course, with various kinds of objectives to be achieved. The current condition is the high level of competition in the world of work. Between employment opportunities and the number of workers that is not comparable. The high number of needs for work while job opportunities are still low. This shows that many workers are not ready to use so that it will cause an increase in unemployment (Alfiati, 2017: 102).

The implementation of the apprenticeship program to Japan is in accordance with the laws and regulations in force in Indonesia today and does not violate the rights and obligations that must be accepted and provided by the parties concerned for mutual interests in accordance with CHAPTER VI articles 20-21 concerning rights and obligations. Related to the statement the writer will explain it as follows:

- 1. Overseas apprentices are entitled to:
  - get pocket money and transport in accordance with the agreement between the apprenticeship participant and the organizer of this pemagan;
  - b. get accident, health and death insurance coverage, whose premiums are borne by the apprenticeship organizer;
  - C. get occupational safety and health facilities during an internship;
  - d. take competency test to get recognition of competency qualifications;
  - e. get a certificate if you have completed the apprenticeship program.
- 2. The apprenticeship providers abroad are entitled to:
  - a. work results / services of apprentices;
  - b. evaluating trade participants;
  - c. dismiss apprenticeship participants who violate the apprenticeship agreement.
- 3. The apprenticeship providers abroad are obliged to:
  - a. provide allowance and transportation in accordance with the agreement between the apprenticeship participants and the apprenticeship organizer;
  - b. provide training facilities;
  - c. provide instructors and training staff;
  - d. providing occupational safety and health facilities while participating in an internship;
  - e. provide accident, health and death insurance cover, the premiums are borne by the organizing agency, the amount of which is in accordance with the provisions in force in the country in which the apprenticeship is conducted;
  - f. include apprentices in competency tests to get recognition
  - g. competency qualifications;
  - h. provide certificates to apprentices who have completed the apprenticeship program;

- i. guarantee that sellers of merchandise trade do not violate the norms of decency;
- j. resolve problems experienced by apprentices during their stay in
- k. country of internship;
- 1. returning apprentices who have completed the apprenticeship program or who violated the apprenticeship agreement;
- 4. Apprentices overseas are required to:
  - a. keep the internship agreement;
  - b. comply with regulations applicable in private and / or company LPKs;
  - c. obey the laws and regulations in force in the country of internship.

The apprenticeship program to Japan will indirectly be a means to open new jobs upon returning to the country. Besides this program can also increase regional income (Harini, 2016: 593). Unemployment is an economic and social burden borne by the community that needs attention from the government to find alternative solutions. Employment providers are very important in overcoming the problem of unemployment. The placement of apprenticeship workers to Japan is an alternative or solution to overcome unemployment and expansion of employment opportunities through the Apprenticeship Program to Japan (Ardana, 2011: 2).

The apprenticeship program to Japan is more aimed at reducing unemployment in Indonesia with the absence of technology as the basic idea of the apprenticeship program to Japan is to transfer technology from Japan to Indonesia. However this program was not completely declared a failure. Although there is no technology transfer from this program, this program has been successful in reducing unemployment in Indonesia and opening up employment opportunities for the people of Indonesia.

#### **CONCLUSION**

The apprenticeship program to Japan by the Department of Manpower and Transmigration with its main objective is to reduce unemployment and the means of building productive labor in accordance with the laws and regulations that apply specifically to the Regulation of the Minister of Manpower and Transmigration of the Republic of Indonesia Number Per. 08 / Men / V / 2008 Regarding Procedures for Licensing and Apprenticeship Overseas Apprenticeship, this is because all processes from the selection process to the end of the apprenticeship program to Japan are going well and smoothly, there are no obstacles or problems that can hinder program activities an internship to Japan. Then in the implementation of the program, the government in collaboration with IM Japan has conducted a neat and structured cooperation contained in the Memorandum of Understanding (MOU).

Technology Transfer in the Internship Program to Japan Perspective of Regulation of the Minister of Manpower and Transmigration of the Republic of Indonesia Number Per. 08 / Men / V / 2008 Regarding Procedures for Licensing and Apprenticeship Overseas Apprenticeship, technology transfer that occurred in the apprenticeship program to Japan from the perspective of the Regulations of the Minister of Manpower and Transmigration of the Republic of Indonesia Number Per. 08 / Men / V / 2008 Regarding the Procedures for Licensing and Apprenticeship Overseas Apprenticeship exists. The internship program to Japan is part of a non-commercial technology transfer that involves the government in the process. Technology transfer that occurs is still limited to hardware, namely for products with technology, because in Indonesia technology transfer is only in the application,

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